

Sedimentological and lithogenetic factor sdetermining the reservoir properties of terrigenous rocks

Shmyrina V., Morozov V., Bakhtin A.

Kazan Federal University, 420008, Kremlevskaya 18, Kazan, Russia

Abstract

Objects of research were oil productive layers of Lower Cretaceous and Upper Jurassic age of the Kustovoye field in Western Siberia. Deposits are presented by the terrigenous rocks which are structurally similar but differ in reservoir properties. The article presents statistical processing of the granulometric analysis data, sediments' porosity, permeability, and the percentage of clay minerals. For definition of various factors influence on reservoir properties we plotted several graphics and carried out a statistical processing of analytical data. It allowed to estimate a role of each of them. The received results allow to estimate a role of two major factors controlling reservoir properties of detrital sediments such as sedimentagenous-catagenetic factor and secondary changes of the imposed character. The most important factor is the kaolinitization. The results should be considered when conducting prospecting works.
